

file

State of Washington  
Department of Ecology  
Yakima, Washington

|  |  |
|--|--|
| IN THE MATTER OF APPLICATION FOR )                       |  |
| CHANGE BY ROY FARMS, INC. OF MOXEE,) Report of Findings, |  |
| WASHINGTON TO CHANGE THE POINT OF ) Conclusions, and     |  |
| WITHDRAWAL AS AUTHORIZED UNDER ) Recommendations         |  |
| GROUND WATER PERMIT NO. G4-25955P )                      |  |

REPORT

Background

On September 2, 1987 Roy Farms, Inc., filed an application for change to change the point of withdrawal as authorized under Ground Water Permit No. G4-25955P. The application was accepted and public notice was given. The 30 day protest period expired with no protests being received.

On September 18, 1987 a Temporary Permit was issued to the applicant authorizing the change in point of withdrawal as requested under the instant change application. The Temporary Permit is stated to remain in effect until such time that a final decision is rendered regarding the instant change application, unless sooner revoked for cause.

Under the provisions of the Temporary Permit, the well is required to be cased and sealed into the first solid, uncreviced basalt flow, which the Department's hydrogeologist, Don Abbott, anticipated would be at a depth of 1,400 feet or greater. In addition, if the driller anticipates that the completed well will be less than 1,400 feet deep, he shall contact Don Abbott, prior to ceasing drilling and before leaving the site.

Investigation

The instant application was evaluated using information obtained from conversation with Mr. Mark Roy of Roy Farms, Inc., and review of office records.

Ground Water Permit No. G4-25955P originally issued to Gordon Meacham on February 16, 1979. On April 14, 1983 the permit was assigned to the applicant.

The permit has a priority date of August 18, 1978 and authorizes the withdrawal of 250 gallons per minute (gpm) and 148 acre-feet per year (8 acre-feet per year to be used for continuous group domestic supply and 140 acre-feet per year to be used from April 1 to October 31 for the irrigation of 40 acres).

The property is located along the lower north slope of Rattlesnake Hills and is approximately 4 miles southeast of the city of Moxee. The place of use is described as being 40 acres within the S $\frac{1}{2}$  of Section 15, T. 12 N., R. 20 E.W.M. lying south of the Roza Canal.

The authorized point of withdrawal is described as being located approximately 600 feet south and 600 feet east of the center of Section 15, being within the NW $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 15, T. 12 N., R. 20 E.W.M. Construction was never begun at this site.

The proposed point of withdrawal is located approximately 1,475 feet south and 700 feet west of the east quarter corner of Section 15, being within the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 15, T. 12 N., R. 20 E.W.M. Construction of the well at this site is currently in progress.

At present, the applicant's well is cased and sealed to a depth of 1,200 feet - terminating in solid basalt. Don Abbott has confirmed that the applicant has complied with the intent of the well construction/depth provisions of the Temporary Permit.

S



Roy Farms, Inc. has a second ground water permit on file which describes 194 acres within the place of use authorized under Ground Water Permit No. G4-25955P. Ground Water Permit No. G4-26742P authorizes the withdrawal of 1,000 gpm and 697 acre-feet per year (679 acre-feet per year for the irrigation of 194 acres from April 1 to October 31 and 12 acre-feet per year for frost control as required). Two points of withdrawal are authorized. Well No. 1 is owned by the Washington State Department of Natural Resources (DNR). It is located approximately 750 feet north and 850 feet west of the east quarter corner of Section 16, being within the SE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 16, T. 12 N., R. 20 E.W.M. Well No. 2 is located approximately 600 feet south and 600 feet east of the center of Section 15, being within the NW $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 15, T. 12 N., R. 20 E.W.M. (Well site No. 2 is the same location as that originally authorized under Ground Water Permit No. G4-25955P.)

An application for change has been filed on Ground Water Permit No. G4-26742P to change the two authorized points of withdrawal to a single point located approximately 1,475 feet south and 700 feet west of the east quarter corner of Section 15, being within the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 15, T. 12 N., R. 20 E.W.M. (The proposed location is the same as that filed on under the instant application for change - G4-25955P.) A decision of the application for change on Ground Water Permit No. G4-26742P is pending.

As discussed in the original Report of Examination, the water requirement for irrigation of orchard in this area is 3.5 acre-feet per year per acre irrigated. Therefore, the total water requirement for 40 acres would be 140 acre-feet per year. Four residences are also to be provided domestic service. The total water requirement for 4 homes would be 8 acre-feet per year.

According to Mr. Mark Roy, the 40 acres have been planted in apple trees and the irrigation distribution system is complete. A 10 inch diameter mainline, reducing to 6 inch, is utilized. Solid set, under-tree sprinklers (9/64 inch nozzle size) are installed with 36 sprinklers per acre. At present, one mobile home is provided domestic service. The remaining residences (also mobile homes) will be developed in the future.

In the past, the applicant has purchased water for use on the property from the Washington State DNR. Water was delivered from the well identified as Well No. 1 on Ground Water Permit No. G4-26742P.

There are two well logs on file for domestic wells located within one-half mile of the applicant's proposed well site which would not have been considered during original permit issuance. Both wells penetrate alternating layers of clay and sandstone. The deepest well is 302 feet deep.

### Conclusions

Most domestic wells in the area withdraw water from sediments overlying the Saddle Mountain Basalt Formation. Therefore, in order to protect existing rights and to limit the effect of irrigation development on shallower domestic wells, this well shall be cased and sealed into the first solid, uncreviced basalt flow. This shall ensure that the applicant withdraws water from the Saddle Mountain Basalt Formation. As previously discussed, the applicant's well, as constructed at this time, meets these requirements.

The proposed change will cause no impairment to existing rights, nor will it enhance the right as originally granted under Ground Water Permit No. G4-25955P.



Recommendations

It is recommended that the requested change of point of withdrawal be approved and that a superseding permit issue for 250 gpm and 148 acre-feet per year (140 acre-feet per year to be used from April 1 to October 31 for the irrigation of 40 acres and 8 acre-feet per year to be used for the continuous group domestic supply for four residences).

The new authorized point of withdrawal is to be located approximately 1,475 feet south and 700 feet west of the east quarter corner of Section 15, being within the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 15, T. 12 N., R. 20 E.W.M.

The authorized place of use remains as 40 acres within the S $\frac{1}{2}$  of Section 15, T. 12 N., R. 20 E.W.M., lying south of the Roza Canal.

A final proof examination shall be conducted prior to issuance of a Certificate of Water Right.

This well shall be cased and sealed into the first solid, uncreviced basalt flow. This shall ensure that the applicant withdraws water from the Saddle Mountain Basalt Formation.

The well driller is required to submit chip samples of the basalts, to be taken every 10 feet while drilling through the basalt. These chip samples shall be submitted to the staff hydrogeologist of this office within 15 days of well completion.

Installation and maintenance of an access port as described in Ground Water Bulletin No. 1 is required. An air line and gage may be installed in addition to the access port.

All water wells constructed within the state shall meet the minimum standards for construction and maintenance as provided under RCW 18.104 (Washington Water Well Construction Act of 1971) and Chapter 173-160 WAC (Minimum Standards for Construction and Maintenance of Water Wells).

That portion of this authorization relating to irrigation is classified as a FAMILY FARM PERMIT in accordance with Chapter 90.66 RCW (Initiative Measure No. 59). This means the land being irrigated under this authorization shall comply with the following definition: Family Farm - a geographic area including not more than 2,000 acres of irrigated agricultural lands, whether contiguous or noncontiguous, the controlling interest in which is held by a person having a controlling interest in no more than 2,000 acres of irrigated agricultural lands in the State of Washington which are irrigated under water rights acquired after December 8, 1977. Furthermore, the land being irrigated under this authorization must continue to conform to the definition of a family farm.

REPORT BY: Dave George  
Dave George

DATE: 2/24/88

APPROVED BY: Doug Clausen  
Doug Clausen, Regional Supervisor

DATE: 2/24/1988

ska  
rm7

S